

**BASCD 2024 Abstract #24****Co-designing an oral health promotion application  
for parents to address childhood caries**

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**Background:**

Early childhood caries (ECC), a preventable chronic disease, is influenced by parents' knowledge and attitudes towards oral healthcare. Mobile apps in mHealth interventions offer a potential solution to raise awareness about children's oral health. The scarcity of apps for parents of children under six underscores the urgent need for tools addressing caries risk factors.

**Objective:**

To co-design and develop a prototype smartphone app with active input from parents and caregivers to address modifiable risk factors associated with ECC and promote oral health in children.

**Methods:**

The app's content was developed following the World Health Organization (WHO) and European Association for Paediatric Dentistry (EAPD) guidelines for paediatric dental care. A panel consisting of five dentists, two nutritionists, and one dental health commissioner reviewed the content, providing expert evaluations and feedback that refined the app's content. Additionally, feedback from parents was gathered through a co-creation workshop in October 2023, leading to adjustments in the app's content based on their inputs. Through a collaborative co-design process involving healthcare professionals and end-users, a beta prototype app called NuParent was developed, integrating evidence-based practices. This study has been approved by the School of Health and Life Sciences Research Ethics Subcommittee.

**Results:**

The key features to be included in the prototype app were identified from the co-designing workshops: e.g., audio descriptions of the educational content to cater to users who are unable to read, and interactive elements such as videos for proper brushing techniques. The participating parents chose the interface design of the app.

**Conclusion:**

NuParent, a co-designed prototype app, addresses the need for preventing early childhood caries in children under six. Its evidence-based features and user-centric design hold promise for significantly impacting oral health outcomes in this demographic.

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